

COLLIS CORPORATION

(Clinton, Iowa)

GENERAL DESCRIPTION

The Collis Corporation is located within the limits of the city of Clinton, Iowa and is generally described as the SE 1/4 of the NW 1/4 of Section 14, T81N, R6E, Clinton County, Iowa. Southern Steel and Wire Holding Co. (Chamberlain Manufacturing Corporation) owns and operates Collis a manufacturing facility, which produces shelving, baskets, and accessories for refrigeration equipment. Steel wire is used to fabricate products and several metal finishing techniques are employed. These techniques include zinc plating followed by chromium conversion coating, lacquer dip and baking, and epoxy coating. The site is about 12.5 acres. The site was entered on the Registry in December 1984.

SITE CLASSIFICATION

The site is classified "c" in accordance with 455B.427.3.

TYPE AND QUANTITY OF HAZARDOUS WASTE

- **Groundwater monitoring has identified elevated levels of chromium, cyanide, nickel, lead, trichloroethylene, arsenic, trans-1,2-dichloroethylene, dichlorofluoromethane, zinc, and total organic halides.**

From 1970 to 1979, chrome plating wastewater treatment sludge was placed in six lagoons located on plant property. An estimated total of 1,090 cubic yards of sludge were disposed of in these lagoons. The lagoons were constructed without any type of liner or leachate collection system. The estimated depth of the sludge is approximately five feet. Also, before 1980, site contamination occurred through numerous spills and leaks from containers and equipment and overflows.

EPA regulates the lagoons under the RCRA program. Part or all of four of the original six lagoons still exist at the site. The area containing the original six lagoons is about 150 feet wide by 300 feet long and is located near the northernmost corner of the plant site. Portions of the existing lagoons have been filled and the containment embankment graded level with surrounding ground. The lagoons also contained water-soluble oil that leached from metal shavings deposited about 50 yards from the lagoons in the late 1970s.

Eleven soil samples collected in the area of the lagoons showed PCBs and elevated levels of several metals in most of the samples. The PCB-Aroclor 1260 was found as high as 53 ppm. The metals included chromium (670 ppm), Copper (4,000 ppm), lead (878 ppm), and zinc (3020 ppm).

The EPA received a closure plan from Collis to remove all contaminated sludge and soil in the lagoon area. Collis began to remove the hazardous waste sludge in November 1986 and continued until February 1987. About 11,000 tons of sludge were removed and transported off-site as a hazardous waste. Prior to sludge removal, about 270,000 gallons of liquid were removed from the impoundments and treated for cyanide destruction in temporary treatment tank structures. The treated liquid was discharged to the sanitary sewer. After sludge removal, another 90,000 gallons of liquids were pumped from the area and removed for off-site treatment.

SUMMARY OF PUBLIC HEALTH AND ENVIRONMENTAL CONCERNS

The Collis facility is located on the Mississippi River floodplain. The soils consist of alternating layers of clay and silts with varying layers of fine to coarse sand or silty sand. Depths to the limestone bedrock range from 6 to 118 feet. Past discharges of wastewater and sludge have caused water quality violations in Mill Creek. Surface water samples indicate there is a significant increase in copper, zinc, and cyanide downstream of the plant's wastewater discharge point. Collis and EPA agree this contamination was caused by the plant's wastewater discharge rather than groundwater flow. Concern over this contamination has decreased due to a revision of the Collis NPDES permit.

STATUS OF ASSESSMENT, MONITORING OR REMEDIAL ACTION

A plan to close the surface lagoons was developed in 1998 through a Consent Agreement and Consent Order for sludge removal, back filling, and site grading. The EPA is regulating this site under RCRA authority. The state will continue to coordinate with EPA to assure proper cleanup. Collis is also conducting a RCRA Facility Investigation under an EPA order (VII-94-H-0001).

In 1998 the Remedial Facility Investigation (RFI) Report addressing soil, groundwater and sediment and surface water Manufacturer's Ditch was completed.

In 2000 the Additional Investigation Activities: Interim Report (an additional assessment) of the extent of ground water contamination within bedrock and off site contamination was completed.

October 2002, RCRA Facility Investigation: Interim Measures Work Plan (Aquifer Test) submitted for aquifer characterization for purpose of evaluating corrective action alternatives. Also, RCRA Facility Investigation: Corrective Measures Work Plan Addendum submitted for the purpose of further characterization of extent of soil and ground water contamination.

2003: The U.S. Environmental Protection Agency (USEPA) provided technical review comments on a Draft RFI/CMS work plan. The purpose of the work plan was to provide a strategy for completing the investigation of soil and groundwater contamination at the facility. Facility representatives and USEPA are planning to meet early in 2004 to discuss USEPA comments on the draft work plan and the revisions that will be required in order for the work plan to be approved.

2004: The EPA met with Collis representatives in February 2004 to discuss the technical review comments prepared by the EPA after the EPA reviewed the RFI/CMS Work Plan. Collis subsequently submitted a revised RFI/CMS Work Plan in August 2004, which is currently being evaluated by EPA. The EPA anticipates having an approved RFI/CMS Work Plan in place in early 2005.

2005: An RFI/CMS work plan was reviewed and approved by the EPA in April 2005. Environmental fieldwork consisting of soil sampling and the installation and sampling of additional new monitoring wells was completed during the summer of 2005. As of December 2005 Collis is in the process of preparing a report on the results of this fieldwork. Upon receipt of this report, the EPA will review it to determine whether the extent of soil and groundwater contamination has been characterized sufficiently to support performing a baseline risk assessment, which is the next step in the corrective action process.

2007: An RFI site assessment report was completed and reviewed by EPA. EPA identified deficiencies in the RFI report, and requested that Collis conduct additional sampling to determine vertical and lateral extent of contamination in soil and groundwater. This additional sampling work will occur in 2008.

